

SEQUENCE LISTING

5 <110> Georgia Tech Research Corporation
Jo, Hanjoong

10 <120> ANTI-INFLAMMATORY AGENTS AND METHODS OF THEIR USE

<130> 820701-1025

15 <150> US 60/439,667

<151> 2003-01-13

<160> 16

20 <170> PatentIn version 3.2

<210> 1

<211> 3547

<212> DNA

25 <213> homo sapiens

<400> 1

ccccgggtcag cgccccgccc cccgcgctcc tcccggccgc tctccccgc ccgccccggc
60

30 cggcgccgac tctgcgggcg ccgacgagc ccctcgcggc actgccccgg ccccgggccc
120

35 ggccccggcc cctccccgc gcaccgcccc cggccccggc ctccgccctc cgcactcccg
180

cctccctccc tccgcccgt cccgcgccct cctccctccc tctccccag ctgtcccggt
240

40 tgcgtcatgc cgagcctccc ggccccgccc gcccgctgc tgctcctcg gctgctgctg
300

ctcggtccc ggccggcccc cggcgccggc ccagagcccc ccgtgctgcc catccgttct
360

45 gagaaggagc cgctgcccgt tcggggagcg gcaggctgca ccttcggcgg gaaggcttat
420

50 gccttgagc agacgtggca cccggacct ggggagccat tcggggtgat gcgtgctg
480

ctgtgcccct gcgaggcgcc tcagtggggt cgccgtacca ggggccctgg cagggtcagc
540

55 tgcaagaaca tcaaaccaga gtgccaacc ccggcctgtg ggcagccgcg ccagctgccg
600

ggacactgct gccagacctg cccccaggag cgcagcagtt cggagcggca gccgagcggc
660

60

ctgtccttcg agtatccgcg ggacccggag catcgagtt atagcgaccg cggggagcca
720

5 ggcgctgagg agcgggcccc tggtagcggc cacacggact tcgtggcgct gctgacaggg
780

ccgaggtcgc aggcggtggc acgagcccga gtctcgctgc tgcgctctag cctccgcttc
840

10 tctatctcct acaggcggtc ggaccgccct accaggatcc gcttctcaga ctccaatggc
900

agtgtcctgt ttgagcaccc tgcagcccc acccaagatg gcctgggtctg tgggggtgtg
960

15 cgggcagtgc ctcggttgtc tctgcggctc cttagggcag aacagctgca tgtggcactt
1020

gtgacactca ctcacccttc aggggaggtc tgggggcctc tcatccggca ccgggcccctg
20 1080

gctgcagaga ccttcagtgc catcctgact ctagaaggcc cccacagca gggcgtaggg
1140

25 ggcatacccc tgctcactct cagtgcaca gaggactcct tgcatttttt gctgctcttc
1200

cgagggtcgc tggaaccag gagtggggga ctaaccaggt ttcccttgag gctccagatt
1260

30 ctacaccagg ggcagctact gcgagaactt caggccaatg tctcagccca ggaaccaggc
1320

tttgctgagg tgctgccaa cctgacagtc caggagatgg actggctggt gctgggggag
35 1380

ctgcagatgg ccctggagtg ggcaggcagg ccagggtcgc gcatcagtgg acacattgct
1440

40 gccaggaaga gctgcgacgt cctgcaaagt gtcctttgtg gggctgatgc cctgatccca
1500

gtccagacgg tgctgcccga ctcagccagc ctcacgctgc taggaaatgg ctccctgatc
45 1560

tatcaggtgc aagtggtagg gacaagcagt gaggtggtgg ccatgacact ggagaccaag
1620

cctcagcggg gggatcagcg cactgtcctg tgccacatgg ctggactcca gccaggagga
50 1680

cacacggccg tgggtatctg ccctgggctg ggtgcccag gggctcatat gctgctgcag
1740

55 aatgagctct tcctgaacgt gggcaccaag gacttcccag acggagagct tcggggggcac
1800

gtggctgccc tgccctactg tgggcatagc gcccgccatg acacgctgcc cgtgccccta
60 1860

gcaggagccc tgggtgtacc ccctgtgaag agccaagcag cagggcacgc ctggctttcc
1920

5 ttggataccc actgtcacct gcactatgaa gtgctgctgg ctgggcttgg tggctcagaa
1980

caaggcactg tcaactgcca cctccttggg cctcctggaa cgccagggcc tcggcggtg
2040

10 ctgaagggat tctatggctc agaggcccag ggtgtggtga aggacctgga gccggaactg
2100

ctgcggcacc tggcaaaagg catggcctcc ctgatgatca ccaccaaggg tagccccaga
2160

15 ggggagctcc gagggcaggt gcacatagcc aaccaatgtg aggttggcgg actgcgctg
2220

gagggcgccg gggccgaggg ggtgcgggag ctgggggctc cggatacagc ctctgctgcg
20 2280

ccgcctgtgg tgcctggtct cccggcccta gcgcccgcga aacctggtgg tcctgggagg
2340

25 ccccgagacc ccaacacatg cttcttcgag gggcagcagc gccccacgg ggctcgctgg
2400

gcgcccact acgaccgct ctgctcactc tgcacctgcc agagacgaac ggtgatctgt
2460

30 gaccggtgg tgtgccacc gccagctgc ccacaccgg tgcaggctcc cgaccagtgc
2520

tgccctgttt gccctgagaa acaagatgtc agagacttgc cagggtgcc aaggagccgg
35 2580

gaccaggag agggctgcta ttttgatggt gaccggagct ggcgggcagc gggtagcgg
2640

40 tggcaccccg ttgtgcccc ctttggtta attaagtgtg ctgtctgcac ctgcaagggg
2700

ggcactggag aggtgcactg tgagaagggt cagtgtcccc ggctggcctg tgcccagcct
2760

45 gtgcgtgtca accccaccga ctgctgcaaa cagtgtccag tggggtcggg ggccacccc
2820

cagctggggg accccatgca ggctgatggg cccgggggt gccgttttgc tgggcagtgg
50 2880

ttccagaga gtcagagctg gcaccctca gtgccccctt ttggagagat gagctgtatc
2940

55 acctgcagat gtggggcagg ggtgcctcac tgtgagcggg atgactgttc actgccactg
3000

tcctgtggct cggggaagga gagtcatgc tgttcccgct gcacggccca ccggcgccca
3060

60

gccccagaga ccagaactga tccagagctg gagaaagaag ccgaaggctc ttagggagca
3120

5 gccagagggc caagtgacca agaggatggg gcctgagctg ggggaaggggt ggcatcgagg
3180

accttcttgc attctcctgt ggggaagcca gtgcctttgc tcctctgtcc tgcctctact
3240

10 cccaccccca ctacctctgg gaaccacagc tccacaaggg ggagaggcag ctggggccaga
3300

ccgaggtcac agccactcca agtcctgcc tgccaccctc ggctctgtc ctggaagccc
3360

15 caccctttc ctctgtaca taatgtcact ggcttggttg gatttttaat ttatcttcac
3420

tcagcaccaa gggccccga cactccactc ctgctgcccc tgagctgagc agagtcatta
20 3480

ttggagagtt ttgtatttat taaaacattt ctttttcagt caaaaaaaaa aaaaaaaaaa
3540

25 aaaaaaa
3547

30 <210> 2
<211> 3561
<212> DNA
<213> homo sapiens

35 <400> 2
cccgggtcag cgcccgcccg cccgcgctcc tcccgccgc tcctcccgc ccgcccggcc
60

cggcgccgac tctgcggccg cccgacgagc ccctcgcggc actgccccgg ccccggcccc
120

40 ggccccggcc ccctcccgc gcaccgcccc cggccccgcc ctccgccctc cgcactcccg
180

cctccctccc tccgcccgt cccgcgcct cctccctccc tcctcccag ctgtcccggt
240

cgcgcatgc cgagcctccc ggcccccg gccccgctgc tgcctctcg gctgctgctg
300

50 ctcggtccc ggccggcccc cggcgccggc ccagagcccc ccgtgctgcc catccgttct
360

gagaaggagc cgctgcccgt tcggggagcg gcaggctgca ccttcggcgg gaaggtctat
420

55 gccttgagc agacgtggca cccggaccta ggggagccat tcggggtgat gcgctgcgtg
480

ctgtgcgct gcgaggcgac agggaccttg aggccagag agatgaagta gcttgtctag
60 540

ggtcacgcag cttcctcagt ggggtcgccg taccaggggc cctggcaggg tcagctgcaa
600

5 gaacatcaaa ccagagtgcc caaccccggc ctgtgggcag ccgcgccagc tgccgggaca
660

ctgctgccag acctgcccc aggagcgcag cagttcggag cggcagccga gcggcctgtc
720

10 cttcgagtat ccgcgggacc cggagcatcg cagttatagc gaccgcgggg agccaggcgc
780

tgaggagcgg gcccggtggtg acggccacac ggacttcgtg gcgctgctga cagggccgag
840

15 gtcgcaggcg gtggcacgag cccgagtctc gctgctgcgc tctagcctcc gcttctctat
900

ctcctacagg cggctggacc gccctaccag gatccgcttc tcagactcca atggcagtgt
960

20 cctgtttgag caccctgcag cccccacca agatggcctg gtctgtgggg tgtggcgggc
1020

25 agtgcctcgg ttgtctctgc ggctccttag ggcagaacag ctgcatgtgg cacttgtgac
1080

actcactcac cttcagggg aggtctgggg gcctctcatc cggcaccggg ccctggctgc
1140

30 agagaccttc agtgccatcc tgactctaga aggccccca cagcagggcg tagggggcat
1200

caccctgctc actctcagtg acacagagga ctccctgcat ttttgctgc tcttccgagg
1260

35 gctgctggaa ccaggagtg gggattctac accaggggca gctactgcga gaacttcagg
1320

40 ccaatgtctc agcccaggaa ccaggctttg ctgaggtgct gcccaacctg acagtccagg
1380

agatggactg gctggtgctg ggggagctgc agatggccct ggagtgggca ggcaggccag
1440

45 ggctgcgcat cagtggacac attgctgcca ggaagagctg cgacgtcctg caaagtgtcc
1500

tttgtggggc tgatgccctg atcccagtcc agacgggtgc tgccggctca gccagcctca
1560

50 cgctgctagg aaatggctcc ctgatctatc aggtgcaagt ggtagggaca agcagtgagg
1620

55 tgggtggccat gacactggag accaagcctc agcggaggga tcagcgcact gtctgtgccc
1680

acatggctgg actccagcca ggaggacaca cggccgtggg tatctgccct gggctgggtg
1740

60

cccgaggggc tcatatgctg ctgcagaatg agctcttcct gaacgtgggc accaaggact
1800

5 tcccagacgg agagcttcgg gggcacgtgg ctgccctgcc ctactgtggg catagcgccc
1860

gccatgacac gctgcccgtg cccctagcag gagccctggg gctaccccct gtgaagagcc
1920

10 aagcagcagg gcacgcctgg ctttccttgg ataccactg tcacctgcac tatgaagtgc
1980

tgctggctgg gcttgggtgg tcagaacaag gcaactgtcac tgcccacctc cttgggcctc
2040

15 ctggaacgcc agggcctcgg cggctgctga agggattcta tggctcagag gccaggggtg
2100

tggtgaagga cctggagccg gaactgctgc ggcacctggc aaaaggcatg gcctccctga
2160

tgatcaccac caagggtagc cccagagggg agctccgagg gcaggtgcac atagccaacc
2220

25 aatgtgaggt tggcggactg cgcctggagg cggccggggc cgaggggggtg cgggcgctgg
2280

gggctccgga tacagcctct gctgcgccgc ctgtggtgcc tggctctccg gccctagcgc
2340

30 ccgccaacc tgggtgtcct gggcgggccc gagaccccaa cacatgcttc ttcgaggggc
2400

agcagcgccc ccacggggct cgctggggcg ccaactacga cccgctctgc tcaactctgca
2460

35 cctgccagag acgaacggtg atctgtgacc cgggtggtgtg cccaccgccc agctgcccac
2520

40 acccggtgca ggctcccgac cagtgtgtcc ctgtttgccc tgagaaacaa gatgtcagag
2580

acttgccagg gctgccaagg agccgggacc caggagaggg ctgctatttt gatggtgacc
2640

45 ggagctggcg ggcagcgggt acgcggtggc acccggttgt gcccccttt ggcttaatta
2700

agtgtgctgt ctgcacctgc aaggggggca ctggagaggt gcaactgtgag aaggtgcagt
2760

gtccccggct ggctgtgcc cagcctgtgc gtgtcaaccc caccgactgc tgcaaacagt
2820

55 gtccagtggg gtcgggggccc cccccagc tgggggaccc catgcaggct gatgggcccc
2880

ggggctgccg ttttgctggg cagtggttcc cagagagtca gagctggcac ccctcagtgc
2940

60

cccccttttg agagatgagc tgtatcacct gcagatgtgg ggcaggggtg cctcactgtg
3000

5 agcgggatga ctgttcaactg ccactgtcct gtggctcggg gaaggagagt cgatgctgtt
3060

cccgtgcac ggcccaccgg cggccagccc cagagaccag aactgatcca gagctggaga
3120

10 aagaagccga aggctcttag ggagcagcca gagggccaag tgaccaagag gatggggcct
3180

gagctgggga aggggtggca tcgaggacct tcttgcatte tctgtggga agcccagtgc
3240

15 ctttgctcct ctgtcctgcc tctactcca cccccactac ctctgggaac cacagctcca
3300

20 caaggggggag aggcagctgg gccagaccga ggtcacagcc actccaagtc ctgccctgcc
3360

accctcggcc tctgtcctgg aagccccacc cctttcctcc tgtacataat gtcactggct
3420

25 tgttgggatt ttttaatttat cttcactcag caccaagggc ccccgacact ccactcctgc
3480

tgcccctgag ctgagcagag tcattattgg agagttttgt atttattaaa acatttcttt
3540

30 ttcagtcaaa aaaaaaaaaa a
3561

35 <210> 3
<211> 3506
<212> DNA
<213> homos sapiens

40 <400> 3
cccggtcag cgcccgccc cccgcgctcc tcccgccgc tcctcccgc ccgcccggcc
60

45 cggcgccgac tctgcgccg cccgacgagc cctcgcggc actgccccg ccccgggccc
120

ggccccggcc ccctcccgc gcaccgcccc cgccccggcc ctccgccctc cgactcccg
180

50 cctccctccc tccgcccgt cccgcgccct cctccctccc tcctcccag ctgtcccgt
240

cgcgtcatgc cgagcctccc ggccccggcg gccccgctgc tgcctctcgg gctgctgctg
300

55 ctccgctccc ggccggcccc cggcgcccgc ccagagcccc ccgtgctgcc catccgttct
360

60 gagaaggagc cgctgcccgt tcggggagcg gcaggctgca ccttcggcgg gaaggtctat
420

gccttgacg agacgtggca cccggaccta ggggagccat tcgggggat gcgctgcgtg
480

5 ctgtgcgcct gcgaggcgcc tcagtggggg cgcgtacca ggggcccctg cagggtcagc
540

tgcaagaaca tcaaaccaga gtgcccaccc ccggcctgtg ggcagccgcg ccagctgccg
600

10 ggacactgct gccagacctg cccccaggag cgcagcagtt cggagcggca gccgagcggc
660

ctgtccttcg agtatccgcg ggacccggag catcgcagtt atagcgaccg cggggagcca
720

15 ggcgctgagg agcgggcccg tggtagcggc cacacggact tcgtggcgct gctgacaggg
780

ccgaggctgc aggcgggtggc acgagcccga gtctcgctgc tgcgctctag cctccgcttc
840

20 tctatctcct acaggcggct ggaccgccct accaggatcc gcttctcaga ctccaatggc
900

25 agtgtcctgt ttgagcacc tgcagcccc acccaagatg gcctggtctg tgggggtgtg
960

cgggcagtgc ctcggttgtc tctgcggctc cttagggcag aacagctgca tgtggcactt
1020

30 gtgacactca ctcacccttc aggggaggtc tgggggcctc tcatccggca ccgggcccctg
1080

gctgcagaga ccttcagtgc catcctgact ctagaaggcc cccacagca gggcgtaggg
1140

35 ggcacacccc tgctcactct cagtgcacac gaggactcct tgcatttttt gctgctcttc
1200

40 cgagggctgc tggaaccag gagtggggat tctacaccag ggcagctac tgcgagaact
1260

tcaggccaat gtctcagccc aggaaccagg ctttgctgag gtgctgcca acctgacagt
1320

45 ccaggagatg gactggctgg tgctggggga gctgcagatg gccctggagt gggcaggcag
1380

gccagggctg cgcacagtgc gacacattgc tgccaggaag agctgcgacg tcctgcaaag
1440

50 tgtcctttgt ggggctgatg ccctgatccc agtccagacg ggtgctgccg gctcagccag
1500

55 cctcacgctg ctaggaaatg gctccctgat ctatcaggtg caagtggtag ggacaagcag
1560

tgaggtggtg gccatgacac tggagaccaa gcctcagcgg agggatcagc gcactgtcct
1620

60

gtgccacatg gctggactcc agccaggagg acacacggcc gtgggtatct gccctgggct
1680

5 gggtgcccga ggggctcata tgctgctgca gaatgagctc ttcctgaacg tgggcaccaa
1740

ggacttccca gacggagagc ttcgggggca cgtggctgcc ctgccctact gtgggcatag
1800

10 cgcccccat gacacgctgc ccgtgcccct agcaggagcc ctggtgctac cccctgtgaa
1860

gagccaagca gcagggcacg cctggcttcc cttggatacc cactgtcacc tgcactatga
1920

15 agtgtgctg gctgggcttg gtggctcaga acaaggcact gtcactgccc acctccttgg
1980

20 gcctcctgga acgccagggc ctcgggcggt gctgaaggga ttctatggct cagaggccca
2040

gggtgtggtg aaggacctgg agccggaact gctgcggcac ctggcaaaag gcatggcctc
2100

25 cctgatgatc accaccaagg gtagccccag aggggagctc cgagggcagg tgcacatagc
2160

caaccaatgt gaggttggcg gactgcgctt ggaggcggcc ggggcccagg ggggtcgggc
2220

30 gctggggggt ccgatacag cctctgctgc gccgcctgtg gtgcctggtc tcccggccct
2280

35 agcggccgcc aaacctggtg gtcctgggcg gccccgagac cccaacacat gcttcttcga
2340

ggggcagcag cgccccacg gggctcgctg ggcgcccac tacgaccgc tctgctcact
2400

40 ctgcacctgc cagagacgaa cggatgatctg tgaccgggtg gtgtgcccac cgccagctg
2460

cccacacccg gtgcaggctc ccgaccagtg ctgccctgtt tgccctgaga aacaagatgt
2520

45 cagagacttg ccagggtgc caaggagccg ggaccagga gagggctgct attttgatgg
2580

tgaccggagc tggcgggcag cgggtacgcg gtggcacccc gttgtgcccc cctttggctt
2640

50 aattaagtgt gctgtctgca cctgcaaggg gggcactgga gaggtgact gtgagaagg
2700

55 gcagtgtccc cggtggcct gtgcccagcc tgtgcgtgtc aacccaccg actgctgcaa
2760

acagtgtcca gtggggtcgg gggccacccc ccagctgggg gacccatgc aggtgatgg
2820

60

gccccggggc tgccgttttg ctgggcagtg gttcccagag agtcagagct ggcacccctc
2880

5 agtgccccct tttggagaga tgagctgtat cacctgcaga tgtggggcag gggcgcctca
2940

ctgtgagcgg gatgactgtt cactgccact gtctgtggc tcggggaagg agagtcatg
3000

10 ctgttcccg cgcacggccc accggcggcc agccccagag accagaactg atccagagct
3060

ggagaaagaa gccgaaggct cttagggagc agccagaggg ccaagtgacc aagaggatgg
3120

15 ggcctgagct ggggaagggg tggcatcgag gaccttcttg cattctcctg tgggaagccc
3180

20 agtgcccttg ctctctgtc ctgcctctac tcccaccccc actacctctg ggaaccacag
3240

ctccacaagg gggagaggca gctgggccag accgaggtca cagccactcc aagtctgcc
3300

25 ctgccaccct cggcctctgt cctggaagcc ccaccccttt cctcctgtac ataatgtcac
3360

tggttggttg ggatttttaa tttatcttca ctccagacca agggcccccg acactccact
3420

30 cctgctgccc ctgagctgag cagagtcatt attggagagt tttgtattta ttaaacatt
3480

tctttttcag tcaaaaaaaaa aaaaaa
3506

35

<210> 4
<211> 2488
40 <212> DNA
<213> homo sapiens

<400> 4
45 gacggagaag gccagtgcc aggttagtga gcagtgccg gcgcccgtt ccctcacctc
60

ctttccagc cttgcacag cttgaagggt ctgtcacctt ttgcagtggc ccaaatgaga
120

50 aaaaagtgga aaatgggagg catgaaatac atcttttcgt tgttggtctt tcttttgcta
180

gaaggaggca aaacagagca agtaaacat tcagagacat attgcatgtt tcaagacaag
240

55 aagtacagag tgggtgagag atggcatcct tacctggaac cttatgggtt gggttactgc
300

gtgaactgca tctgctcaga gaatgggaat gtgctttgca gccgagtcag atgtccaaat
360

60

gttcattgcc tttctcctgt gcatattcct catctgtgct gccctcgctg ccagactcc
420

5 ttacccccag tgaacaataa ggtgaccagc aagtcttgcg agtacaatgg gacaacttac
480

caacatggag agctgttcgt agctgaaggg ctctttcaga atcggcaacc caatcaatgc
540

10 acccagtgcg gctgttcgga gggaaacgtg tattgtgggc tcaagacttg ccccaaatta
600

acctgtgcct tcccagtcct tgttccagat tctgtctgcc gggatatgcag aggagatgga
660

15 gaactgtcat gggaacattc tgatgggtgat atcttccggc aacctgccaa cagagaagca
720

20 agacattctt accaccgctc tcaactatgat cctccaccaa gccgacaggc tggaggtctg
780

tcccgctttc ctggggccag aagtcaccgg ggagctctta tggattccca gcaagcatca
840

25 ggaaccattg tgcaaattgt catcaataac aaacacaagc atggacaagt gtgtgtttcc
900

aatggaaaga cctattctca tggcgagtcc tggcaccxaa acctccgggc atttggcatt
960

30 gtggagtgtg tgctatgtac ttgtaatgtc accaagcaag agtgaagaa aatccactgc
1020

35 cccaatcgat acccctgcaa gtatcctcaa aaaatagacg gaaaatgctg caaggtgtgt
1080

ccaggtaaaa aagcaaaaga acttccaggc caaagctttg acaataaagg ctacttctgc
1140

40 ggggaagaaa cgatgcctgt gtatgagtct gtattcatgg aggatgggga gacaaccaga
1200

aaaatagcac tggagactga gagaccacct caggtagagg tccacgtttg gactattcga
1260

45 aagggcattc tccagcactt ccatattgag aagatctcca agaggatggt tgaggagctt
1320

cctcacttca agctgggtgac cagaacaacc ctgagccagt ggaagatctt caccgaagga
1380

50 gaagctcaga tcagccagat gtgttcaagt cgtgtatgca gaacagagct tgaagattta
1440

55 gtcaagggtt tgtacctgga gagatctgaa aagggccact gttaggcaag acagacagta
1500

ttggataggg taaagcaaga aaactcaagc tgcagctgga ctgcaggctt attttgctta
1560

60

agtcacagct gccctaaaac tccaaactca aatgcagctca attattcacg ccatgcacag
1620

5 cataatttgc tccttttgtgt ggagtgggtgt gtcagccctt gaacatctcc tccaaagaga
1680

ctagaagagt cttaaattat atgtgggagg aggagggata gaacatcaca acactgctct
1740

10 agtttcttgg agaatcacat ttctttacag gttaaagaca aacaagaccc cagggttttt
1800

atctagaaag ttattcaagt gaaagaaaga gaagggaatt gcttagtagg agttctgcag
1860

15 tatagaacaa ttacttgtat gaaattatac ctttgaattt tagaatgtca tgtgttcttt
1920

taaaaaaatt agctcccat cctccctcct cactccctcc ctccctcctt ctctctctct
1980

20 ctctctctcc ctccctctct cacagacaca cacacacaca cacacacaca cacacacag
2040

25 caggtccaca ctacattaa acgaaagctt tatttgaagc aaagctagcc aagattctac
2100

gttacttttc ccttgactgg atcccaagta gcttggaagt ttttgtgccc aggagagtaa
2160

30 ataactgtga acaagaggct ctgcccttag gtctttgtgg ctgtttaagt caccaacaat
2220

agagtcaggg taaagaataa aaacactttc atagcctcat tcattcactt agaagtggta
2280

35 ataatttttc cctaatagata ccacttttct tttccccctg tacctatggg acttccagaa
2340

40 agaagttaaa ttgagtaaaa tcatcagaaa ctgaatccat gtaagaaaaa ataattgttg
2400

aagaaagaag ttgatagaat tcaaaaaggc catctttttg ctttcacatc aataaaattt
2460

45 accaagtaat aaaaaaaaaa aaaaaaaaa
2488

50 <210> 5
<211> 1311
<212> DNA
<213> homo sapiens

55 <400> 5
cagcgaggag ccggcgccct ccgcgccccg cggtcgccct ggagtaattt cggatgcccc
60

gccgcggccg ccttccccag tagaccggg agaggagttg cggccaactt gtgtgccttt
120

cttccgcccc ggtgggagcc ggcgctgcgc gaagggtctt cccggcggct catgctgccg
180

5 gccctgcgcc tgcccagcct cgggtgagcc gcctccggag agacggggga gcgcggcggc
240

gccgcgggct cggcgtgctc tcctccgggg acgcgggacg aagcagcagc cccgggcgcg
300

10 cgccagaggc atggagcgct gccccagcct aggggtcacc ctctacgccc tgggtggtggt
360

cctggggctg cgggcgacac cggccggcgg ccagcactat ctccacatcc gcccggcacc
420

15 cagcgacaac ctgcccctgg tggacctcat cgaacacca gaccctatct ttgaccccaa
480

ggaaaaggat ctgaacgaga cgctgctgcg ctgcgtgctc gggggccact acgaccagg
540

20 cttcatggcc acctcgcccc ccgaggaccg gcccggcggg ggcgggggtg cagctggggg
600

25 cgcgaggagc ctggcggagc tggaccagct gctgcggcag cggccgtcgg gggccatgcc
660

gagcgagatc aaagggttag agttctccga gggcttggcc cagggaaga agcagcgctt
720

30 aagcaagaag ctgcggagga agttacagat gtggctgtgg tcgcagacat tctgccccgt
780

gctgtacgcg tggaacgacc tgggcagccg cttttggccg cgctacgtga aggtgggcag
840

35 ctgcttcagt aagcgctcgt gctccgtgcc cgagggcag gtgtgcaagc cgtccaagtc
900

40 cgtgcacctc acggtgctgc ggtggcgtg tcagcggcgc gggggccagc gctgcggctg
960

gatcccatc cagtacccca tcatttccga gtgcaagtgc tcgtgctaga actcgggggc
1020

45 cccctgcccg caccgggaca cttgatcgat cccaccgac gcccctgca ccgcctccaa
1080

ccagttccac caccctctag cgagggtttt caatgaactt tttttttttt tttttttttt
1140

ttctgggcta cagagacctg gctttctggt tcctgtaatg cactgtttta ctgtgtagga
1200

55 atgtatatgt gtgtgtatat acggtcccag ttttaattta cttattaaaa ggtcagtatt
1260

atacgttaaa aaaaaaaaaa ccaaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a
1311

60

<210> 6
<211> 14
<212> PRT
<213> artificial
5
<220>
<223> artificial sequence of cystine knot

10 <220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> X= any residue

15 <220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> X= any residue

20 <220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> X= any residue

25 <220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> X= any residue

30 <220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X= any residue, and any number of residues

35 <220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> X= any residue

40 <220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> X= any residue

45 <400> 6

Cys Xaa Cys Xaa Gly Xaa Cys Xaa Cys Xaa Cys Xaa Cys Xaa
1 5 10

50
<210> 7
<211> 17
<212> PRT
<213> artificial
55
<220>
<223> cystine knot motif

60 <220>
<221> MISC_FEATURE

<222> (2)..(2)
<223> x= any residue

5 <220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> x= any residue

10 <220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> x= any residue

15 <220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> x= any residue

20 <220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> x= any residue

25 <220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> x= any residue

30 <220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> x= any residue

35 <220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> x= any residue

40 <400> 7
Cys Xaa Cys Xaa Cys Xaa Gly Xaa Cys Xaa Cys Xaa Cys Xaa Cys Xaa
1 5 10 15

45 Cys

50 <210> 8
<211> 19
<212> PRT
<213> artificial

55 <220>
<223> cystine knot motif

60 <220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> x = any residue

<220>
<221> MISC_FEATURE
<222> (4)..(4)
5 <223> x = any residue

<220>
<221> MISC_FEATURE
<222> (6)..(6)
10 <223> x = any residue

<220>
<221> MISC_FEATURE
<222> (8)..(8)
15 <223> x = any residue

<220>
<221> MISC_FEATURE
<222> (11)..(11)
20 <223> x = any residue

<220>
<221> MISC_FEATURE
<222> (13)..(13)
25 <223> x = any residue

<220>
<221> MISC_FEATURE
<222> (15)..(15)
30 <223> x = any residue

<220>
<221> MISC_FEATURE
<222> (18)..(18)
35 <223> x = any residue

<400> 8

40 Cys Xaa Cys Xaa Cys Xaa Cys Xaa Cys Cys Xaa Cys Xaa Cys Xaa Cys
1 5 10 15

Cys Xaa Cys

45

<210> 9
<211> 18
<212> PRT
50 <213> artificial

<220>
<223> cystine knot motif

55

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> x= any residue
60 <220>

<221> MISC_FEATURE
<222> (4)..(4)
<223> x= any residue

5 <220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> x= any residue

10 <220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> x= any residue

15 <220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> x= any residue

20 <220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> x= any residue

25 <220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> x= any residue

30 <220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> x= any residue

35 <400> 9

Cys	Xaa	Cys	Xaa	Cys	Xaa	Cys	Xaa	Cys	Xaa	Cys	Xaa	Cys	Xaa	Cys	Cys
1				5				10						15	

40 Xaa Cys

45 <210> 10
<211> 19
<212> PRT
<213> artificial

50 <220>
<223> cystine knot motif

55 <220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> x = any residue

60 <220>
<221> MISC_FEATURE
<222> (4)..(4)

<223> x = any residue

<220>
<221> MISC_FEATURE
5 <222> (6)..(6)
<223> x = any residue

<220>
<221> MISC_FEATURE
10 <222> (8)..(8)
<223> x = any residue

<220>
<221> MISC_FEATURE
15 <222> (10)..(10)
<223> x = any residue

<220>
<221> MISC_FEATURE
20 <222> (12)..(12)
<223> x = any residue

<220>
<221> MISC_FEATURE
25 <222> (14)..(14)
<223> x = any residue

<220>
<221> MISC_FEATURE
30 <222> (16)..(16)
<223> x = any residue

<220>
<221> MISC_FEATURE
35 <222> (18)..(18)
<223> x = any residue

<400> 10

40 Cys Xaa Cys Xaa Cys Xaa Cys Xaa Cys Xaa Cys Xaa Cys Xaa
1 5 10 15

45 Cys Xaa Cys

<210> 11
50 <211> 26
<212> DNA
<213> artificial

<220>
55 <223> primer sequence

<400> 11
ctgcgggact tcgaggcgac acttct
26

60 <210> 12

<211> 26
<212> DNA
<213> artificial

5 <220>
<223> primer sequence

<400> 12
tcttcctcct cctcctcccc agactg
10 26

<210> 13
<211> 43
15 <212> DNA
<213> artificial

<220>
<223> primer sequence
20

<400> 13
atggactgtt attatgcctt gttttctgtc aacaccatga ttc
43

25 <210> 14
<211> 31
<212> DNA
<213> artificial

30 <220>
<223> primer sequence

<400> 14
35 ccacgtatag tgaatggcga cggcagttct t
31

40 <210> 15
<211> 34
<212> DNA
<213> artificial

<220>
45 <223> primer sequence

<400> 15
gtcaacacca tgattcctgg taaccgaatg ctga
50 34

<210> 16
<211> 30
<212> DNA
55 <213> artificial

<220>
<223> primer sequence

60 <400> 16

ttatacgggtg gaagccctgt tcccagtcag
30